IN THE UNITED STATES DISTRICT COURT

FOR THE NORTHERN DISTRICT OF CALIFORNIA

FRANCIS C. SZOKA, and DAVID LARWOOD,

Plaintiffs,

v.

MARTIN C. WOODLE, FRANCIS J. MARTIN, ANNIE YAU-YOUNG, CARL T. REDEMANN, and ALZA CORPORATION,

Defendants.
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No. C 02-05524 SI

FINDINGS OF FACT AND CONCLUSIONS OF LAW

In November, 2002, plaintiffs Francis C. Szoka and David Larwood brought this action claiming sole or co-inventorship of the invention claimed in U.S. Patent No. 5,013,556 ("'556 Patent"). The '556 patent, which issued in May, 1991, is titled "Liposomes with Enhanced Circulation Time." The four individual defendants – Martin C. Woodle, Francis J. Martin, Annie Yau-Young, and Carl T. Redemann – are currently named as the sole inventors. The remaining defendant, Alza Corporation ("Alza"), owns the '556 patent.

From January 10 through 18, 2005, the Court took evidence, including live testimony, sworn narrative statements and documentary evidence, on plaintiffs' inventorship claim. On April 5, 2005, the Court heard closing arguments by both sides. At that hearing, the Court ordered the parties to submit proposed findings of fact on the key credibility issues in the case. The Court has determined that these credibility issues are dispositive of the requested change in inventorship and will therefore limit its factual findings accordingly. This order constitutes this Court's findings of fact and conclusions of law in accordance with Federal Rule of Civil Procedure 52(a).

Plaintiffs must establish their entitlement to correction of inventorship by clear and convincing evidence. This they have not done. After careful consideration of all the evidence, as well as the arguments of counsel, the Court finds that Szoka and Larwood are not the sole inventors or co-inventors of the invention claimed in the '556 Patent. Accordingly, they are not entitled to correction of inventorship pursuant to 35 U.S.C. § 256, to a declaration that plaintiffs are equitable titleholders of the patent, or to compensation and equitable remedies.

BACKGROUND

Liposomes are microscopic lipid vesicles, which are used for targeted delivery of pharmaceuticals to different cells and organs. Plaintiff Szoka claims that he was the first to discover that incorporating polyethylene glycol lipids (PEG-lipids) into liposomes enhances the liposomes' circulation time *in vivo*. He further claims that his former graduate student, co-plaintiff David Larwood, "successfully synthesized the PEG-lipids molecules, incorporated the molecules into liposomes, tested the modified liposomes in animals, and showed that they circulated for a longer period than did the unmodified liposomes." Third Am. Compl. at ¶ 14.

Plaintiffs seek declaratory judgment to correct inventorship under 35 U.S.C. § 256, naming Szoka and Larwood as sole inventors. Id. ¶¶ 12-24. They also bring claims for unjust enrichment and a declaration of equitable title in the patent since its issuance. They seek damages, restitution, and other equitable remedies, including an accounting and disgorgement of the approximately $92 million in profits Alza has earned from the sale of its Doxil® chemotherapy treatment product on the grounds that the sale of Doxil® constitutes use of the invention of the '556 patent. Id. ¶¶ 25-29; see also Prayer.

FINDINGS OF FACT ON CREDIBILITY ISSUES

According to plaintiffs, the evidence at trial established that they conceived of and reduced to practice all of the independent claims of the '556 patent and the features depending from those claims,

back during the 1979 - 1986 time frame. They contend that Dr. Szoka disclosed the invention to LTI[1] and Cooper-Lipotech[2] scientists on four occasions: twice at Cooper-Lipotech research meetings, at which defendant Francis Martin was present; once at lunch with Martin near the Cooper-Lipotech offices; and once at his UCSF office. Szoka also testified that he provided Martin with a copy of a 1986 NIH grant application in which he proposed research targeting liposomes to HIV-infected cells.

The Court resolves the main credibility questions raised by the parties, specifically: (1) whether Szoka and Dr. Pedro Huertas should be believed over Martin and Viola Kung on the issue of Szoka's communication of the invention at Cooper-Lipotech meetings; (2) whether Szoka or Martin is more credible on the question of Szoka's alleged communication over lunch "outside the San Francisco laboratory"; (3) whether Szoka or Peter Dehlinger is more credible regarding Szoka's alleged communication to Dehlinger and Dehlinger's response; (4) the credibility of Dr. Yau-Young's testimony about her process of inventing the '556 patent; and (5) whether Szoka and Larwood's testimony about why they did not learn about the '556 patent until 2001 is believable.

1. Szoka's alleged communications to Francis Martin at Cooper-Lipotech meetings

The Court does not find Dr. Szoka credible on the subject of his communications of the invention to Dr. Martin and others at Cooper-Lipotech research meetings. The sole evidence of these disclosures is the testimony of Dr. Szoka himself and Dr. Huertas. Francis Martin and Viola Kung had no recollection of these discussions.[3]

At trial, Dr. Szoka testified that he communicated plaintiffs' work on pegylated liposomes to one of the defendants, Dr. Francis Martin, at two research meetings held at Cooper-Lipotech, one in 1982

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[1]LTI is Liposome Technology, Inc., a company founded by plaintiff Szoka and others in 1981to develop products using liposomes. Undisputed Fact Nos. 19-20.

[2]Cooper-Lipotech, Inc. was a joint venture formed in about 1981 between LTI and Cooper Biomedical, Inc. According to its Preincorporation Agreement, the purpose of Cooper-Lipotech was to develop a limited number of diagnostic or immunoassay products using liposomes. Its charter specifically excluded uses of liposomes *in vivo*, i.e., for therapeutic purposes. Martin Narr. ¶¶ 6-8.

[3] Viola Kung testified that Szoka "may have talked about PEG lipids at Cooper-Lipotech" and "may have given advice to Cooper-Lipotech on their hemagglutination assays." 6 Tr. 837:14-20. However, she also testified that she had no recollection of the communications Szoka describes making at these meetings.

and one in 1983. During this period, Dr. Martin was the Technical Director at Cooper-Lipotech, and Szoka was an advisor to the company and a member of the Board of Directors. Szoka Narr. ¶¶ 75-76. In these capacities, they both attended research meetings along with the scientific founders of LTI, Cooper-Lipotech consultants, and Cooper-Lipotech employees, including Dr. Pedro Huertas, who worked there from 1981 to 1983. Huertas Narr. ¶¶ 1-2; 4-12.

Szoka testified that, at a research meeting in mid- to late 1982, he disclosed his and Larwood's work on incorporating PEG-lipids into liposomes to this group during a discussion of how to solve a problem with a diagnostic assay. Szoka Narr. ¶¶ 75, 80; Huertas Narr. ¶¶ 6-9. Specifically, Szoka claims to have disclosed that he and Larwood "had synthesized PEG-PE derivatives using PEGs with a molecular weight of 5000 daltons, and had incorporated the PEG-lipid into a liquid composition by the rehyradtion method . . . [and] that he had calculated that up to 20 mole % PEG-lipid derivatives [either saturated or unsaturated] could be incorporated into liposomes." Szoka Narr. ¶¶ 75, 80; Huertas Narr. ¶¶ 6-9; 1 Tr. 93:23-95:20; 2 Tr. 168:20-170:14. Szoka also testified that he told the Cooper-Lipotech group that he and UCSF lab technicians working under him had injected the PEG-PE modified liposomes into mice and observed that blood levels of the pegylated liposomes were higher than that of non-pegylated liposomes. There is no documentary evidence of any such statements. Dr. Huertas corroborated this disclosure in his testimony, and also stated that Szoka discussed targeting the liposomes to specific cells and tissues by attaching ligands, antibodies, and other targeting molecules to pegylated liposomes. Huertas Narr. ¶ 9.

According to plaintiffs, the Cooper-Lipotech group did not initially follow his suggestion, and Szoka raised it again at another meeting in January or February 1983, at which Martin and Huertas were also present. At this second meeting, Szoka testified, he described the chemical process ("imidazolide chemistry") by which plaintiffs had prepared and activated the PEG-lipids, provided a sample of a PE-lipid, and shared his protocol and glassware. Szoka Narr. ¶¶ 82-83; 1 Tr. 95:22-97:3.

According to plaintiffs, sometime between March and June 1983, Cooper-Lipotech scientists synthesized PEG-lipids and incorporated them into liposomes. Szoka Narr. ¶ 83; 2 Tr. 159:6-163:25. They synthesized PEG-PE using the imidazolide chemistry Dr. Szoka had allegedly described in the research meetings, using 15 mole percent PEG-lipids in the liposome composition. Szoka Narr. ¶ 84;

Huertas Narr. ¶ 10. Szoka also testified that, at another Cooper-Lipotech meeting in 1983, he provided a pre-print of a research article by himself and Larwood, which established the chemistry for activating polyethyleneglycol. Szoka Narr. ¶ 85; 1 Tr. 102:3-14; Huertas Narr. ¶ 12; 2 Tr. 194:15-195:14.

Defendants contend, and the Court finds, that it in entirely implausible that Szoka made such extensive disclosures concerning therapeutic uses of liposomes at such Cooper-Lipotech meetings. Given the competitive posture of LTI and Cooper Biomedical, there was at least an informal Cooper-Lipotech policy forbidding any discussion of "therapeutics," or therapeutic (*in vivo*) applications of liposomes, at research meetings in order to avoid any conflicts about intellectual property ownership between Cooper-Lipotech and LTI. This policy was not written, and Francis Martin and Viola Kung testified that they did not know of anyone being reprimanded for violating the policy, 6 Tr. 842:8-23; 6 Tr. 883:3-5, but the documents incorporating the joint venture specified that it was only to focus on diagnostic uses of liposomes and was to exclude therapeutic uses.[4] Given the close quarters shared by the LTI and Cooper-Lipotech personnel, and the obvious value which all the participants placed on the potentially lucrative intellectual property which might be developed by one or the other of the competitors, the Court finds it believable that a serious effort was made to avoid joint discussions of topics, like therapeutic developments, which were not intended to produce joint results. The Court finds Martin and Kung's denials more reliable than Szoka's testimony as to the alleged disclosures at Cooper-Lipotech meetings.

Defendants contend that Dr. Huertas' testimony is not reliable, both because he seemed confused at times and admitted to harboring some bias against defendant Alza because he believed that Alza scientists had taken credit for his own work. When asked why he was testifying, Huertas stated that he wanted the Court "to be aware that the work that [he] performed preceded the claim in [the '556] patent by several years." 2 Tr. 171:11-21. While the Court does not make any specific finding based on these admissions, it does not find Dr. Huertas' recollections of the Cooper-Lipotech meetings over twenty

[4]Indeed, Dr. Martin testified that Cooper was also interested in therapeutic applications of liposomes, and that there had been "spirited debate" about the appropriate scope of the joint venture, but LTI "had decided to reserve therapeutic applications for itself." 5 Tr. 788:6-11. Thus the agreement specifically defined its field to "exclude the uses of liposomes or liposome systems which are directly or indirectly administered to or in a living animal or human." Martin Narr., ¶ 8; DTX 1262.

years ago to be reliable. Dr. Huerta' surprisingly acute level of detail about Szoka's alleged disclosures in one of the Cooper-Lipotech meetings, see Huertas Narr. at ¶¶ 6-9, contrasts significantly with his vague recollection of other details from the early 1980s, including his memory of his own work from that period and the content of a particular article provided by Szoka at a second Cooper-Lipotech meeting. 2 Tr. 189:2-13; 205:7-16.

The Court finds that the testimony of Dr. Martin, which is consistent with that of Dr. Kung, is more reliable than the testimony of Dr. Szoka and Dr. Huertas on these points. Thus, the Court finds that Dr. Szoka did not present his research on pegylated liposomes at the Cooper-Lipotech meetings, as he claims.

2. Szoka's alleged communication to Francis Martin "outside the San Francisco laboratory"

The Court does not find Dr. Szoka credible regarding this disclosure. According to Szoka, in late 1983 or early 1984, after another research meeting at Cooper-Lipotech, he and Francis Martin sat eating lunch "outside the South San Francisco Laboratory." 1 Tr. 103:2-3. During this lunch, Szoka claims to have told Martin that his staff at USCF had incorporated between about 1 and 17 mole % PEG-lipids into liposomes, injected them into animals, and observed that there were more pegylated than non-pegylated liposomes in circulation. Szoka claims that Martin responded that did not believe that this method would be useful in humans. In addition, Szoka testified that he later reminded Martin and defendant Woodle about his invention in December 1988, in Szoka's office at UCSF.

Defendants flatly deny that the discussion over lunch, disputed by Francis Martin and uncorroborated by any other witness, ever happened or could have happened. Martin testified that (1) he did not remember ever having lunch outside the laboratory and that there was nowhere to sit and eat outside, (2) the only restaurant near Cooper-Lipotech where he ate was too far to walk, and (3) he did not know enough about therapeutic applications of liposomes in 1983-84 to have participated in such a conversation.

Plaintiffs do not dispute Martin's statement that there was nowhere to eat outside the building, but have submitted evidence that there was a restaurant nearby, Sandwich Palace. The Court does not consider this evidence particularly salient on the question of credibility, and agrees with defendants that

Szoka's recollection of eating lunch "outside the laboratory" is not corroborated.

On or about October 4, 1986, Szoka sent Martin a copy of his NIH grant proposal for targeting liposomes to HIV-infected cells. Defendants argue that this disclosure undermines plaintiffs' inventorship claim because it is unlikely that, a few years after he allegedly told Dr. Martin how long-circulating pegylated liposomes would work successfully, he sought research funding from NIH to find out whether they would work. The Court also finds it implausible that Dr. Szoka would have made these disclosures in 1982 and 1983, and then applied for research funding in 1984 and 1986 from NIH to determine whether pegylation had any effect on the circulation time of liposomes.

3. Szoka's alleged communications to Peter Dehlinger[5]

Dr. Szoka testified that he first asked Peter Dehlinger, patent counsel to UCSF, Cooper-Lipotech, and LTI, in 1983 to mid-1984 whether an application could be filed for the invention of incorporating PEG-lipids into liposomes to create long circulating liposomes. Szoka Narr. ¶ 89. Then, after a patent ("the '330 patent") was issued to another inventor, Barry Sears, in January 1984, Szoka asked Dehlinger whether his invention of incorporating the PEG-lipids into liposomes to enhance circulation times would be patentable over the Sears patent. Szoka Narr. ¶ 90-91. This second conversation allegedly occurred after a meeting at LTI. 2 Tr. 221:24-222:10. Szoka testified that he gave Dehlinger a copy of the Sears patent or the patent number, and that Dehlinger told him that he did not think it was patentable. Szoka Narr. ¶ 91; Szoka Reb. Narr. ¶ 6-7; 2 Tr. 220:9-11.

Dehlinger testified that he did not recall Szoka telling him about the invention, and that it was inconceivable that he would have provided an opinion on patentability as alleged by Szoka. 4 Tr. 613:23-614: 3; 614:20-615:1. According to Dehlinger, he did not give opinions on patentability without complying with certain procedures, which he only did if he received authorization from UCSF. Id. at 615:1-6.

The Court finds that Szoka's descriptions of his disclosure to Dehlinger and the patentability

[5] Defendants argue that Szoka's alleged communication to Dehlinger is irrelevant in the absence of a communication to at least one of the named inventors. Eli Lilly & Co. v. Aradigm Corp., 376 F.3d 1352, 1359 (Fed. Cir. 2004).

opinion allegedly obtained are entirely implausible. Szoka testified that, although he and Dehlinger discussed the issue after an LTI meeting, he sought the opinion in Dehlinger's capacity as UC's counsel, see 2 Tr. 224:13-19, and Szoka was asking as a UC employee, not an LTI representative, because he "made it clear . . . that it wasn't an LTI issue" but rather that the work had been done at UC. 2 Tr. 223:4-15; 228:15-24. Szoka did not give Dehlinger any document or written description of his invention, and thus Dehlinger allegedly opined that the invention was unpatentable without reviewing any materials other than the Sears patent. See 2 Tr. 221:21-222:10; 223:16-20.

The Court finds it unlikely that Dehlinger would have been able to provide a patent opinion with this scant information. In addition, it also finds implausible that Dehlinger would have exposed himself to a blatant conflict of interest by answering Szoka's question without better clarifying their respective affiliations with respect to the proposed invention. As defendants argue, even if the Court believes Szoka that both he and Dehlinger put their UC hats on for purposes of this conversation, the alleged communication would therefore be a disclosure to a UC attorney, not to the defendants in this case.

Plaintiffs contend that they impeached Dehlinger, as follows: Dehlinger testified that Szoka would not have asked him to prepare a patent application for UC that Szoka paid for initially, but later assigned to the University. Plaintiffs successfully demonstrated that Dehlinger had filed and prosecuted a prior patent application, for which invoices were sent by Dehlinger's law firm to Szoka while Szoka was abroad, and which was later assigned to UCSF. 4 Tr. 634:15-636:7; 637:13-17; 638:5-25. The impeachment of Dehlinger on this issue does not undermine the Court's finding that Dehlinger's testimony was generally truthful. The Court finds that the scenario described by Szoka was not credible.

4. Dr. Yau-Young's testimony

Dr. Yau-Young testified that she conceived of her invention independently of the plaintiffs, and specifically that she did not learn about any work by Szoka or Larwood on pegylated liposomes before

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she wrote a July 1987 memo about her concept.[6] 5 Tr. 682:3-11. She also testified that she did not discuss her idea with anyone, including Francis Martin, before writing her July 1987 memo. Id.

Dr. Yau-Young's work during the relevant period was on developing long circulating liposomes using "GM1" liposomes, or "Stealth liposomes," work into which LTI put a great deal of effort. Martin Narr. at ¶ 14; Yau-Young Narr. at ¶ 18; 5 Tr. 803:1-3. According to Yau-Young, she conceived of the idea of using PEG to increase circulation time in 1986, after reading a paper by Dr. Abuchowski about pegylated proteins, and she communicated this idea to Dr. Anthony Huang at a July 1987 meeting of the Formulation Group at LTI. Yau-Young Narr. at ¶¶ 20-22. She then submitted a written research proposal, and recorded the idea in her notebook in December 1987. Yau-Young Narr. at ¶¶ 23, 25.

Yau-Young's conception is well-documented, and the Court finds her description entirely credible. Plaintiffs argue that Yau-Young's description of events is not credible because she interacted with and reported to Francis Martin at LTI and because scientists in her group, the Formulation Group, and Martin's Research Group, were aware of one another's work. Plaintiffs also contend that her recollection of her initial conception in 1986 is too vague to be reliable. The Court disagrees on both points: the level of interaction among LTI employees does not discredit Yau-Young's description of how she thought of the idea, nor does her inability to clearly recollect what happened in 1986 undermine her description of the communication and documentation of that conception in 1987. Accordingly, the Court finds that Dr. Yau-Young arrived independently at her conception of the invention contained in the '556 patent.

Notably, plaintiffs' case hinges on the alleged communications to defendant Martin. Plaintiffs did not even attempt to establish that Szoka discussed his invention with any of the other three inventors, each of whom testified that their inventions were their own. Dr. Yau-Young testified that she did not obtain any part of her ideas about pegylated liposomes from Dr. Szoka or anyone else at LTI. Dr. Redemann stated that he obtained a technique for activating PEG using carbonyl di-imidazole from his prior experience at the Dow Chemical Company, that this method would have been familiar to most chemists in the 1980s, and that his activation technique was different from Szoka and Larwood's.

[6] In addition, she testified that she had never heard of David Larwood before this lawsuit. 5 Tr. 682:12-17.

Plaintiffs introduced no evidence that Dr. Woodle had information about Szoka's invention, and Woodle testified that Szoka never told him about his work with pegylated liposomes.

5. Szoka and Larwood's credibility regarding the delay in filing suit

It is not disputed that LTI scientists spent a great deal of time and effort attempting to develop long-circulating liposomes from 1985 until 1988, using Stealth liposomes instead of pegylated ones. 5 Tr. 801:3-803:1. According to Szoka's testimony, although he had previously communicated his conception of using pegylated liposomes to increase circulation time during 1983 and 1984, and although he sat on the Scientific Advisory Board of LTI, he said nothing further during this period, despite the struggles of LTI scientists to create viable long-circulating liposomes. The Court finds it implausible that Szoka allowed his alleged conception to lie fallow during this gap in time, while the LTI scientists around him pursued a different strategy – with his apparent knowledge and without success. Either Francis Martin and the other LTI scientists did not know about long-circulating pegylated liposomes during this time (because Szoka never communicated the idea to them), or Dr. Szoka himself did not know or believe at this time that pegylated liposomes would be long-circulating. The latter explanation is more likely, particularly because Szoka did not assign anyone in his lab to continue working on his alleged pegylated liposome project after Larwood left in 1983, did not publish anything on the subject, and changed his own area of focus to the gangliosides used in the Stealth liposomes. 2 Tr. 250:19-251:1; 249:19-24; 247:12-24. In any event, these facts undermine Szoka's testimony about either his conception of the idea, its communication to defendants, or both.

On October 20, 1989, defendants Woodle, Yau-Young, Martin, and Redemann filed an application for the '556 patent, which was handled by Peter Dehlinger. According to plaintiffs, they were unaware of the patent application, and Dr. Szoka did not become aware of his rights in the '556 patent until mid to late 2001, when he was contacted by defendant Alza Corporation to be an expert in another patent case. Szoka had a potential conflict of interest because he had co-founded a company recently acquired by Valentis, the parent company of the plaintiff in that case, and so he declined. Valentis' counsel mentioned the '556 patent to Szoka, and he obtained a copy and reviewed it.

Defendants argue that plaintiffs either knew or should have known of the '556 patent at least ten

years earlier, in 1992, when Szoka filed another patent application (the '669 patent) which states: "[v]arious types of activators for PEG and monomethoxy PEG have been described in U.S. Pat. No. 5,013,556 to Woodle et al." Joint Pretrial Conf. Stat., Undisputed Fact No. 38.[7] In addition, they argue that Larwood, who had gone on to become a patent lawyer, must have known about the '556 patent by 1993, because in that year he took over prosecution of the '669 patent application and filed an amendment specifically correcting the reference to the '556 patent in the '669 patent application. Szoka acknowledged reviewing the application, but he testified that he focused only on the description of the invention, and Larwood stated that his work on the 1993 amendment involved minor typographical changes, and he did not read the entire patent or the references.

These explanations are implausible because Szoka's 1992 patent application states that "[v]arious types of activators for PEG and monomethoxy PEG have been described in U.S. Patent No. 5,013,556 to Woodle et al." In addition, the Court agrees with defendants that Larwood should or would have reviewed the prior art in filing the 1993 amendment, consistent with his duty to do so, and that his law firm submitted to the patent office a list of references and stated that the '556 patent "may be material to examination of this application." The front page of the '556 patent would have provided notice that the patent disclosed "Liposomes with Enhanced Circulation Time," and particularly when coupled with Dr. Woodle's name, would have indicated to Szoka that LTI might have patented long-circulating pegylated liposomes.

Therefore, the Court finds not credible the testimony that neither Szoka nor Larwood reviewed the '556 patent in connection with Szoka's 1992 patent application, and accordingly finds that plaintiffs had actual knowledge of the patent in September 1992.

CONCLUSIONS OF LAW

[7] The Court does not find that plaintiff Szoka knew or should have known about defendants' patent because of his familiarity with the work being done by defendant Woodle on pegylated liposomes at LTI, his knowledge of LTI's pegylated liposome product Doxil, or his sophistication in the area of patents and biotechnology companies. The record does not clearly establish Szoka's awareness of these facts, and thus they are not the basis for the finding that plaintiffs should have known or at least suspected that LTI had a patent on long-circulating pegylated liposomes.

Inventorship

The inventors named in the '556 patent, Drs. Woodle, Martin, Yau-Young, and Redemann are "presumed to be correct." Hess v. Advanced Cardiovascular Sys., Inc., 106 F.3d 976, 980 (Fed. Cir. 1997). To establish correction of inventorship, plaintiffs bear the burden of establishing inventorship by clear and convincing evidence. Id. at 979-80. For sole inventorship, plaintiffs must show that they conceived of each and every limitation in all of the claims in the '556 patent. Ethicon, Inc. v. U.S. Surgical Corp., 135 F.3d 1456, 1460 (Fed. Cir 1998); Trovan, Ltd. v. Sokymat S.A., Irori, 299 F.3d 1292, 1302 (Fed. Cir. 2002). In addition, plaintiffs must also provide "corroborating evidence of a contemporaneous disclosure that would enable one skilled in the art to make the invention." Burroughs Wellcome Co. v. Barr Labs, Inc., 40 F.3d 1223, 1228 (Fed. Cir. 1994). For co-inventorship rather than sole inventorship, plaintiffs need only show contribution to one claim of the patent.

The Court finds that plaintiffs have not established inventorship by clear and convincing evidence, nor have they presented corroborating evidence of a contemporaneous disclosure that would have enabled one skilled in the art to make the invention. As discussed above, the Court does not find Dr. Szoka credible on the subject of the four communications to Dr. Francis Martin, the alleged communications to Peter Dehlinger, or the subject of when Szoka learned about the '556 patent. Moreover, Szoka and Larwood's oral testimony about their conceptions of the invention rest on their post hoc review of notebooks containing details of various experiments, and is insufficient to establish contemporaneous recognition of the invention, rather than simply "nunc pro tunc" conception. Estee Lauder Inc. v. L'Oreal, S.A., 129 F.3d 588, 593-94 (Fed. Cir. 1994).

Co-Inventorship

Plaintiffs have also brought a claim for joint inventorship, seeking to be added to the patent in this capacity. A claim for joint inventorship requires a showing of collaboration between plaintiffs and defendants. 35 U.S.C. § 116; Eli Lilly & Co. v. Aradigm Co., 376 F.3d 1352, 1359 (Fed. Cir 2004). Plaintiffs did not pursue this claim at trial; their proof focused solely on Szoka's alleged disclosures of the communications to one of the defendants. Indeed, the proof at trial was to the contrary: Dr. Yau-Young was solely responsible for the invention in the broadest claims, and it is undisputed that she and

Dr. Szoka never worked together; Drs. Woodle, Redemann, and Martin worked on more specific aspects of the patent claims in the LTI laboratories.

Damages and Doctrine of Laches

Because the Court finds that plaintiffs have not met their burden of establishing inventorship by clear and convincing evidence, they are not entitled to damages. In addition, the Court finds that the doctrine of laches applies to plaintiff's claims. For the doctrine to apply, there must be (1) unreasonable and unexcused delay and (2) material prejudice to the defendants as a result. Advanced Cardiovascular Sys., Inc. v. Scimed Life Sys., Inc., 988 F.2d 1157, 1163 (Fed. Cir. 1993). There is a presumption of laches if the delay is six years or more. Id.

The Court has found that plaintiffs knew or should have known about the subject matter of the '556 patent at least by 1992, at the time of Dr. Szoka's application for the '669 patent. This action was filed in 2002. Thus, defendants are entitled to the presumption of laches, and plaintiffs have not rebutted this presumption. The Court has found Szoka and Larwood not credible on the subject of why they did not discover the '556 patent and its subject matter in 1992.

Accordingly, the Court finds that no correction of inventorship is required.

IT IS SO ORDERED.

Dated: March 6, 2006

Susan Illston

SUSAN ILLSTON
United States District Judge